

In the next episode, we invite you to explore the Arctic environment as we guide you through the surroundings of Tromsø, located in northern Norway. Despite Tromsø being situated above the Arctic Circle, its climate is relatively mild due to the influence of the North Atlantic Current. With tides reaching over 2 meters, this fascinating location provides an opportunity to showcase the ecosystems thriving at the water-land interface.

In this captivating exploration, we embark on a journey that spans the delicate boundary between land and sea—the transition zone where terrestrial and marine ecosystems converge. As we step onto the shoreline, we encounter discarded dead algae, a vital source of sustenance for a diverse array of organisms. These algae serve as both nourishment and carbon reservoirs, supporting life in the coastal zone and beyond. Their decomposition releases essential nutrients into the water, sustaining marine animals and contributing to the intricate web of life.

Moving further seaward, we encounter macroalgae—remarkable plants that cling to rocks and stones. Among them, the fucus or bladderwrack species dominates, providing shelter for young marine creatures. This zone teems with biodiversity, as various organisms find refuge amidst the waving fronds. The macroalgae play a crucial role in shaping the coastal ecosystem, influencing nutrient cycling and providing habitat complexity.

Yet, our journey doesn't end here. With each step into the open sea, we enter a realm unseen by the naked eye. Microplankton, single-celled plants, dominate the North Atlantic waters. Their diversity—comprising hundreds of species—fuels primary production, forming the foundation of the oceanic food pyramid. These tiny plants, like underwater grass, sustain herbivores and set the stage for the entire marine ecosystem.

In summary, our three steps—from the shoreline to the tidal zone and into the open sea—reveal the interconnectedness of life. From discarded algae to invisible microorganisms, every element plays a vital role in maintaining the delicate balance of our oceans.

|                     |         |
|---------------------|---------|
| <b>Responsible:</b> | Paulina |
| <b>Created by:</b>  | IO PAN  |

|                         |                  |
|-------------------------|------------------|
| <b>Created at:</b>      | 23.07.2024       |
| <b>Published by:</b>    | Paulina Pakszys  |
| <b>Published at:</b>    | 23.07.2024 10:22 |
| <b>Number of views:</b> | 3112             |